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ABSTRACT

A substantial knowledge base exists on reduction of tobacco use by youth. Effective prevention in this area can have major health and economic benefits. Information from research and prevention practice, organized by means of the Prevention Enhancement Protocols System (PEPS), is provided in the form of guidelines and recommendations for planning prevention programs. Topics presented are: (1) "How Did PEPS Develop the Practitioner's Guide?"; (2) "Why Focus on Tobacco Use among Youth"; (3) "How Big a Problem is Tobacco Use among Youth?"; (4) "General Recommendations: How Can Practitioners Have the Greatest Impact?" which makes suggestions for planning and implementing a successful prevention program; and (5) "What Works? Six PEPS Prevention Approaches." Six types of interventions are outlined: economic interventions, counteradvertising, retailer-directed interventions, multicomponent school-linked community approaches, tobacco-free environment policies, and restriction of advertising and promotion. The following information is presented for each approach: the goals of the intervention, rationale, objectives and activities of studies reviewed, level of evidence, and lessons learned from reviewed evidence. Several recommendations for practice are provided from the PEPS expert panel for each approach. Appendixes are: "Criteria for Establishing Levels of Evidence of Effectiveness," "Abbreviations and Glossary," and "Resource Guide." (EMK)

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Substance Abuse and Mental Health Services Administration
Center for Substance Abuse Prevention

ED 424 533

Reducing Tobacco Use Among Youth: Community-Based Approaches

A Guideline for Prevention Practitioners

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Prevention Enhancement
Protocols System (PEPS)



DEPARTMENT OF HEALTH AND HUMAN SERVICES
Substance Abuse and Mental Health Services Administration
Center for Substance Abuse Prevention

CG028843

The Prevention Enhancement Protocols System (PEPS) Series was initiated to systematically evaluate both research and practice evidence on substance abuse prevention and then compile recommendations for the field. In doing so, PEPS strives to maximize the prevention efforts of State substance abuse prevention agencies, practitioners, and local communities.

Prakash L. Grover, Ph.D., M.P.H., is the Program Director of PEPS and the Executive Editor of the guideline series for the Center for Substance Abuse Prevention (CSAP). Mary Davis, Dr.P.H., served as the team leader of the staff. Richard Clayton, Ph.D., wrote Chapters 1 and 2, and Mim Landry crafted Chapter 3 out of deliberations of the subpanel of experts. Mary Davis and Jennie Heard wrote Chapter 4. The staff wrote chapters with substantial assistance from the Expert Panel. Chip Moore assumed primary responsibility for editing the document in its final stages. Donna Dean wrote the Practitioner's Guide and the Community Guide based on the evidence summarized in the main guideline. Substantial review was conducted by Robert W. Denniston, Mark Weber, Tom Vischi, and Lisa Gilmore. During development of this guideline, Sheila Harley, CSAP, served as the Government Project Officer of the Prevention Technical Assistance to States (PTATS) project under which this publication was produced.

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The presentations herein are those of the Expert Panel and do not necessarily reflect the opinions, official policy, or position of CSAP, SAMHSA, or the U.S. Department of Health and Human Services.

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Prevention Enhancement Protocols System (PEPS)

**REDUCING TOBACCO USE AMONG YOUTH:
COMMUNITY-BASED APPROACHES**

A Guideline for Prevention Practitioners

1st in a Series

Substance Abuse and Mental Health Services Administration
Center for Substance Abuse Prevention
Division of State and Community Systems Development

Acknowledgments

This is the first guideline in the series, Prevention Enhancement Protocols System (PEPS), sponsored by the Center for Substance Abuse Prevention (CSAP). Inasmuch as the quality of this work is predicated on the program that generated it, we wish to acknowledge not only the contributions of those who created this document, but also the extraordinary efforts of people who helped develop the PEPS program.

When we conceptualized PEPS, no models of evidence-based guidelines for behavioral interventions existed. We, therefore, had to develop the concept, structure, and operations of the program, harvesting the expertise of agencies such as the Agency for Health Care Policy and Research, the Center for Substance Abuse Treatment, and others. However, once the basic program concept was solidified, the PEPS Planning Group became more than an equal partner in its development. The leadership of Richard Clayton, as chair of the Planning Group, and Robin Room and Ralph Hingson, who graciously took on the role of cochairs when needed, was indispensable, as were the contributions of Lois McBride, assisted by Suzanne Boland, of Birch & Davis Associates, Inc.

During the past 3 years, which were critical in testing our operational model, other Birch & Davis team members made valuable contributions as well. Mary Davis and Mim Landry contributed both to the PEPS program as well as the guidelines. Jennie Heard and, later, Chip Moore patiently edited the document through its many inevitable drafts and changing perspectives.

All through the challenging period of program development, the leadership and guidance of Gale Held were sagacious, supportive, and immensely useful. With the reorganization of the Substance Abuse and Mental Health Services Administration and the change in leadership at CSAP, the support of Ruth Sanchez-Way, the new Division of State and Community Systems Development Director, has been equally indispensable.

The Expert Panel assumed major responsibility for refining the prospectus of this guideline and guiding the staff in its development. Tony Biglan, Richard Clayton, Renato Espinoza, Ellen Feighery, Marilyn Massey, and James Neal, as a subgroup of the Expert Panel, made sense of all the research and practice evidence and crafted recommendations and lessons for the field.

Several Federal Departments and Agencies participated through the Federal Resource Panel. CSAP acknowledges their contribution with gratitude. The special efforts of Centers for Disease Control and Prevention, Office on Smoking and Health, and the Food and Drug Administration in reviewing the document are greatly appreciated.

CSAP also gratefully acknowledges the assistance of the scores of professionals in the States' offices of substance abuse and tobacco control. Their reviews and comments should greatly enhance the potential utility of the guideline and its related documents.

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Foreword

The Substance Abuse and Mental Health Services Administration (SAMHSA) is pleased to present to the field *Reducing Tobacco Use Among Youth: Community-Based Approaches—A Guideline for Prevention Practitioners*. This is the first such handbook to be generated from a series of prevention guidelines planned by the Center for Substance Abuse Prevention's (CSAP's) Division of State and Community Systems Development under its Prevention Enhancement Protocols System (PEPS).

CSAP established PEPS in 1992 as one of its efforts to strengthen the substance abuse prevention systems in the States and territories. In a nutshell, the PEPS guidelines attempt to answer often-asked questions, such as:

- Which interventions alone or in combination work in preventing substance use?
- Under what circumstances do they work?
- How does a practitioner choose one intervention over another?
- How can a chosen intervention be implemented?

Using the "evidence-based" methodology, the PEPS guidelines identify and analyze all the research as well as practice knowledge available in order to synthesize it and develop recommendations for practice. In this process, PEPS taps the expertise of a wide array of researchers, practitioners, and policymakers to increase the utility of its recommendations. Lessons learned from the research and practice evidence are supplemented with recommendations based on the considerable experience of the experts who participate in the development of the guides. When such recommendations are made, the source of advice is clearly identified so readers can better assess how their own situations relate to the example mentioned.

Besides providing sound advice for program planners and practitioners, a formal program, such as PEPS, that systematically assesses prevention research and practice has many advantages for the field. First, it results in efficient use of limited resources. Second, it directs our focus to the need to continuously collect data on the content, processes, and outcomes of prevention programs in order to measure their effectiveness. Third, by illuminating areas in which there is insufficient evidence, it encourages research to fill those gaps and spur the development of innovative practices. And, finally, it promotes the accumulation of knowledge as more and more practitio-

ners try out approaches and exchange information. This last step is critical in the development and solidification of the field.

This guide is designed to stimulate and support the prevention activities of State and local agencies and community-based organizations, including grassroots efforts affiliated with schools, churches, workplaces, and other community institutions. Individual practitioners, such as school teachers, health personnel, justice and law enforcement officials, lay and religious leaders as well as youth leaders, may also find this document useful in addressing tobacco use among youth in their communities.

SAMHSA and CSAP selected this topic for several reasons: First, tobacco use among youth has been repeatedly documented as a priority public health problem. Second, focusing on underage smokers and users of smokeless tobacco also supports one of the goals identified in *Healthy People 2000: National Health Promotion and Disease Prevention Objectives*. Finally, and most importantly, this guide responds to the needs of the States in meeting the Synar Amendment to the 1992 Alcohol, Drug Abuse, and Mental Health Administration Reorganization Act. The amendment requires all States to document good-faith efforts to inhibit access by youth to tobacco products and report on their results each year. Among its mandates, the amendment requires all States to enact laws prohibiting any manufacturer, retailer, or distributor of tobacco products from selling or distributing such products to anyone under the age of 18. The amendment also requires all States to document good-faith efforts to inhibit access by youth to tobacco products and report on their results each year.

The Synar Amendment is a substantial complement to the August 1996 publication of the final rule on tobacco in the *Federal Register*, which charges the Food and Drug Administration with regulating the sale and distribution of cigarettes and smokeless tobacco to children and adolescents. Both the Synar Amendment and the FDA rule buttress the efforts of the National Center for Chronic Disease Prevention and Health Promotion at the Centers for Disease Control and Prevention, which has been active in efforts to modify risk factors regarding tobacco, nutrition, and physical activity and to encourage comprehensive prevention approaches, including school health education, community health promotion, and prevention centers. Other related Federal Government activities include the National Institute on Drug Abuse, which produces numerous publications in prevention and treatment research, epidemiology, behavioral research, and health services research.

CSAP would like to thank the PEPS Planning Group, the Federal Resource Panel, and the Expert Panel for their contributions to the development of the PEPS program and this guide.

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Reducing Tobacco Use Among Youth: A Guideline for Prevention Practitioners

The Prevention Enhancement Protocols System, or PEPS, was created by the Center for Substance Abuse Prevention (CSAP) to systematically identify current knowledge on prevention programs and to develop recommendations to guide and strengthen the prevention efforts of the States and communities. Tobacco use among youth was chosen as the topic for the first PEPS document.

A great deal has been written about prevention research studies, practice cases, and initiatives aimed at reducing tobacco use among youth. To date, however, this valuable information has been largely inaccessible to practitioners and communities in a systematic and usable form. Under the PEPS program, panels of prevention experts have for the first time organized information on effective prevention programs into a set of guidelines and recommendations that are written for practitioners and are based on a systematic assessment of program effectiveness. This practitioner's guide summarizes the findings and recommendations, which are presented in full in the comprehensive guideline, entitled *Reducing Tobacco Use Among Youth: Community-Based Approaches*.

The practitioner's guide is a unique planning tool. Using the practitioner's guide, you can:

- Become familiar with a broad range of community-based prevention strategies and approaches.
- Strengthen the effectiveness of your prevention programs by using the "General Recommendations" to guide your program planning and implementation.

- Benefit from the evidence-based "Lessons Learned," which are based on a review and analysis of prevention research and practice evidence categorized into six different prevention approaches.
- Benefit from the "Recommendations for Practice," which are based on the expertise of the PEPS expert panel and the research and practice evidence.

How Did PEPS Develop the Practitioner's Guide?

CSAP decided to develop its prevention guidelines on the basis of evidence in the field rather than on professional consensus. This approach demanded a greater investment of time and effort, but it was thought that the resulting product would provide more valid and useful tools for prevention planners and practitioners.

CSAP further determined that, for each topic developed as a guideline, three PEPS documents would be essential to support and strengthen prevention systems:

- A comprehensive *prevention* guideline that describes in full an overview of the substance abuse topic to be evaluated, a review of the prevention approaches used to address the problem, an analysis of the effectiveness of these approaches, a discussion of lessons learned and recommendations, suggestions for program implementation, and suggestions for future research
- A practitioner's guide that distills the guideline into a "user-friendly" summary
- A community guide pamphlet that practitioners may use to illustrate the rationale for their proposed prevention plans and to solicit community involvement and support

The process by which PEPS developed these documents included the following steps:

- Identification and analysis of relevant prevention research studies and practice cases (which constitutes *research and practice evidence*) to determine the effectiveness of each research study and prevention practice case
- Organization of the research and practice evidence into logical and cohesive groups called *prevention approaches*, followed by an analysis of the effectiveness of each approach. This synthesis enabled the PEPS expert panel to:
 - Describe the rationale, objectives, and activities of the research and practice evidence grouped within each prevention approach
 - Determine the conclusions that can be reached for each prevention approach and the strength of the evidence for these conclusions. Four levels of evidence (Appendix A) were defined and applied:
 - Strong level of evidence of effectiveness
 - Medium level of evidence of effectiveness
 - Suggestive but insufficient evidence of effectiveness
 - Substantial evidence of ineffectiveness
 - Determine evidence-based lessons learned for each of the approaches

- Make recommendations for practice and implementation based on prevention research and practice evidence and the expertise of the expert panel members

Why Focus on Tobacco Use Among Youth?

CSAP decided to focus the first PEPS guideline on reduction of tobacco use by youth for three primary reasons. The first was the belief that effective prevention intervention in this area can have major health and economic benefits. The second was the existence of a substantial knowledge base that could be synthesized and presented to practitioners. Finally, such a document was considered a timely and essential complement to the States' efforts to reduce tobacco use among youth as required by Public Law 102-321, popularly known as the Synar Amendment to the Alcohol, Drug Abuse, and Mental Health Administration Reorganization Act of 1992.

Prevention experts believe that tobacco control efforts directed at adult smokers have little chance to progress beyond the current level of success. If additional progress is to be made to prevent individuals from smoking, tobacco control efforts need to be focused on youth. Studies show that few take up tobacco after the age of 18; most smokers who become addicted to nicotine do so as adolescents. It is here that prevention efforts offer the greatest potential for success.

Federal activity in this area is gaining momentum:

- *Healthy People 2000: National Health Promotion and Disease Prevention Objectives* places emphasis on programs for underage smokers and users of smokeless tobacco (U.S. Department of Health and Human Services 1990).
- The Surgeon General's 1994 report, *Preventing Tobacco Use Among Young People*, underscores the need for programs that target adolescents (U.S. Department of Health and Human Services 1994).
- The Institute of Medicine's 1994 report, *Growing Up Tobacco Free*, stresses the importance of policy and program planning (Institute of Medicine 1994).
- The Synar Amendment to the 1992 Alcohol, Drug Abuse, and Mental Health Administration Reorganization Act requires all States to exhibit good-faith efforts to inhibit access by youth to tobacco products.
- In February of 1996, the FDA issued the final rule regarding the sale, distribution, advertising, and promotion of cigarettes.

In 1994, the Center for Substance Abuse Prevention (CSAP) announced its intent to fill two significant gaps:

- The States must be urged to focus on reducing tobacco use by youth.
- Through the PEPS program, specific recommendations must be developed for practice based on tobacco use prevention approaches of demonstrated effectiveness.

To fill these gaps, PEPS staff surveyed all published and unpublished prevention research as well as programs nominated by State substance abuse agencies and others. Although programs are operating in almost every State, only those that offered sufficient documentation are included in the PEPS guideline.

Reducing Tobacco Use Among Youth: Community-Based Approaches, the book-length guideline, is the first document developed using the PEPS process. It includes discussions of tobacco use among youth, community-based prevention approaches, and implementing action plans, as well as analysis of the six prevention approaches, the research and practice evidence reviewed, the findings, recommendations for practice, and suggestions for future research.

This *practitioner's guide* summarizes that document. Although useful because of its brevity, this guide is not a substitute for the comprehensive guideline. Readers are encouraged to review the guideline in its entirety for a complete presentation.

How Big a Problem Is Tobacco Use Among Youth?

Tobacco use among youth is probably more prevalent than most adults would believe. Ironically, a significant part of the problem is that tobacco use among youth is not a major source of concern to parents, the public, or even some health care providers. This attitude prevails, despite growing evidence that nicotine is an addictive drug with significant short- and long-term consequences for the health of our children and the economy of our Nation.

On the positive side, the climate for tobacco control has never been more favorable. All States currently have tobacco prevention programs, and many communities are beginning to address this problem.

What Do We Know About Kids and Tobacco?

- America's young people begin smoking at a very early age, despite the fact that selling tobacco products to minors is illegal.
 - 1 out of 2 eighth-graders has tried cigarettes.
 - 1 in 5 high school seniors, 1 in 7 tenth-graders, and 1 in 12 eighth-graders currently smoke cigarettes.
- Seventy percent of 12- to 17-year-old smokers report at least one symptom of nicotine dependence or addiction.
- Nicotine dependence in young smokers occurs much earlier in life than previously suspected.
- One-third of youth reporting dependency have tried to quit and failed.
- When smokeless tobacco use is included, figures for tobacco use by males jump significantly:

- 48 percent of male high school juniors and seniors, 42 to 44 percent of male eighth- to tenth-graders, and 29 percent of male seventh-graders use cigarettes and smokeless tobacco regularly.

Although tobacco use among youth has declined in the last 15 years, the *Monitoring the Future* study shows a disturbing resurgence in youth cigarette use between 1992 and 1996 (Johnson et al. 1996).

The tobacco industry spends almost \$6 billion a year on advertising. It is widely recognized that adolescents are exposed to and affected by tobacco-sponsored advertising.

General Recommendations: How Can Practitioners Have the Greatest Impact?

On the basis of its analysis of research studies and practice cases, the PEPS Expert Panel makes the following General Recommendations:

Use a Community-Based, Integrated, Multicomponent Approach

Community-based means that the program involves general community members and representatives of local organizations, agencies, schools, and the media. An *integrated approach* means that the individual components support and enhance each other. A *multicomponent program* is one in which a number of coordinated efforts target a single issue. Working in concert, the various components have a more powerful, visible, and lasting impact.

The following example illustrates the differences between a single-component intervention and a multicomponent approach to reducing youth access to tobacco.

- Single-component intervention: Passing a law to prohibit tobacco sales to minors
- Integrated multicomponent approach:
 - Enacting laws prohibiting tobacco sales to minors
 - Enforcing these laws through publicized purchase attempts involving underage purchasers and police sponsorship or cooperation
 - Educating merchants and community members about adolescent tobacco use and laws prohibiting tobacco sales to minors
 - Seeking broad-based community support of these prevention efforts
 - Educating judges to impose significant consequences on violators of the tobacco sales laws

Each of the approaches described in this guide works well as part of a community-based, integrated multicomponent program, the prevention model that has proven to be most effective.

Involve Community Members and Organizations From the Earliest Stages

Strive for sustained, comprehensive community support. This will make the program part of the community and provide the structure necessary for success over the long term. A community partnership should include the following individuals and organizations:

- Elected officials and other community leaders
- Representatives of all ethnic groups in the community
- Local business persons and merchants
- Students and student organizations
- School system
- Government agencies
- Social agencies and associations
- Mayor's office
- Police department and judicial system

Educate Merchants, Law Enforcement Officials, and Judges

For community education components in youth access interventions, prevention efforts should include retail merchants, policy- and decisionmakers, the police, and the judicial system. Retail merchant education should include written materials for the retail store owner and clerks and the regional executives of retail store chains. Ideally, these materials should be delivered in person by teams including representatives from the police department, adolescents, and the community. Practitioners should aggressively pursue partnerships with the police and judges. Police in some areas are reluctant to enforce adolescent tobacco sales laws and may need coaxing. Similarly, judges are often reluctant to impose consequences on local merchants for violating the adolescent tobacco sales laws. With perseverance and by providing targeted information and education, however, the police and judges can become ardent supporters of prevention efforts.

Involve Adolescents in All Aspects of the Program

Adolescents have shown themselves to be particularly valuable in the design, planning, and implementation of community programs. Youth involvement is vital for two primary reasons:

- Adolescents understand the values, attitudes, perspectives, and beliefs of their peers.
- Youth involvement may serve as a deterrent to future tobacco use and helps create a strong and informed generation in which being smoke-free is the norm.

Gather Baseline Data To Determine the Extent of the Problem in Your Community

This information will help you define your target population and program goals, objectives, and activities. Some of the information might come from adolescents who are invited to participate in focus groups or similar small-group sessions. You will need to know:

- The prevalence and patterns of tobacco use among youth, which can be obtained through the health department
- Community knowledge, attitudes, and practices relating to youth and tobacco products
- The degree of readiness for change in various sectors of the community (Who will work with you? Who will work against you?)
- Existing efforts addressing tobacco issues, especially interventions to prevent tobacco use among youth
- Where and how easily minors can purchase tobacco products in the community
- The adequacy of school-based smoking prevention programs

Select Your Target Group and Define Your Goals and Objectives

The target group and goals should be determined on the basis of your community's needs, as revealed by the needs assessment. Be as specific as possible; also, make sure your goals are realistic. Include the following four elements:

- *Who?* (the target group for change)
- *What?* (the action or change you expect)
- *How much?* (the extent of change you expect)
- *When?* (the time frame for change)

Select Interventions That Will Actively Involve Your Target Population

Review the six prevention approaches described in this document. Which of these approaches are most appropriate for your population? Which intervention activities best support your goals and objectives? Before you select an approach, review each one carefully, paying special attention to the "Level of Evidence" (see Appendix A for criteria) regarding the effectiveness of the approach, the "Lessons Learned," and "Recommendations for Practice."

Provide an Array of Activities

After you have selected your approach, review the activities suggested for that intervention and choose those that will best help you meet your objectives. Call on the creativity of your planning group to develop additional activities that move you toward your goals.

Link Your New Initiatives With Existing Programs or Activities Whenever Possible

This approach has several benefits:

- Prevention activities become part of existing networks.
- The likelihood of local acceptance and support is increased.
- Duplication of services is avoided.
- A valuable partnership with key community members is developed.

Use Existing Materials

There exists a wealth of effective printed and audiovisual educational prevention materials regarding adolescent substance use, much of it in the public domain. When such materials are available and appropriate for the target audience, using them can save time and money. Similarly, modifying existing prevention materials to more effectively meet the needs of a target audience is much less expensive than developing them from scratch. Existing educational materials may be appropriate for one audience but may need to be revised to ensure cultural sensitivity and appropriateness. Some programs develop or modify a few elements of an existing multielement educational program. When such materials include specific identifiers of the community, setting, and sponsors, the sense of partnership and ownership can be enhanced.

Include Smokeless Tobacco Use Prevention in Your Interventions

One study reported that smokeless tobacco was used by 15 percent of nonsmokers and 32 percent of youth who smoked during the past month.

Consider the Need for Programs To Help Nicotine-Dependent Youth Quit

Conventional primary prevention (encouraging people not to start) or secondary prevention (encouraging people to quit) may not be powerful enough to break dependence on nicotine. Special programs for nicotine-dependent youth should be a part of all tobacco control programs.

Gather Data at All Stages

As noted above, you will need baseline data to mount a successful program. Once you have this information, develop procedures to routinely collect data as program implementation proceeds. A well-documented program is more likely to receive funding. Equally important, data collection generates information of great value to your colleagues and researchers in the field.

Prepare for Opposition

Learn what the tobacco industry is doing regionally, and develop counterarguments and strategies, especially with respect to youth's use of tobacco products.

Realize That Prevention Efforts Need To Be a Sustained Process

New smokers are continually joining the ranks of youth who use tobacco. Success in prevention depends on continually assessing and improving interventions. If your effort is to be sustained, your community efforts must be continually strengthened with new members. Community education should be ongoing.

What Works? Six PEPS Prevention Approaches

A *prevention approach* is a collection of prevention activities that broadly share common methods and strategies, assumptions (theories or hypotheses), and outcomes. The six prevention approaches summarized here are:

- Economic Interventions
- Counteradvertising
- Retailer-Directed Interventions
- Multicomponent School-Linked Community Approaches
- Tobacco-Free Environment Policies
- Restriction of Advertising and Promotion

Two of the six prevention approaches were sufficiently broad to have identifiable subsets, each with its own emphasis or focus. These subsets of prevention approaches are referred to as *clusters*. Practitioners are encouraged to refer to the comprehensive guideline for a detailed description of these six approaches. The following pages present a brief description of each prevention approach and highlights of the conclusions drawn from the evidence.

PREVENTION APPROACH 1: Economic Interventions

The primary goals of economic interventions as a prevention approach are to raise the price of tobacco products through increased taxes and thereby prevent youth from taking up smoking, delay the age at which they might begin, and decrease the level of tobacco consumption.

Rationale

Adolescents, who have limited financial resources, are sensitive to price increases. Higher prices should reduce the likelihood of adolescent tobacco purchases.

Objectives of the Studies Reviewed

- To determine whether adolescent demand for cigarettes fluctuates in response to decreases and increases in the Federal excise tax
- To compare trends in tobacco consumption in States where there are tax increases with trends in States where there are no tax increases

- To identify the effect of increases in Federal tobacco excise taxes on the number of adolescent smokers

Activities of the Studies Reviewed

- Increase in taxes on cigarettes through the Federal legislative process
- Increase in taxes on cigarettes through State legislation

Level of Evidence

The research evidence reviewed indicates that laws can be established or modified to increase Federal or State taxes on tobacco products:

There is **strong evidence** that instituting tobacco tax increases is an effective approach to reduce the prevalence of adolescent tobacco use—especially when the tax is sufficiently high and is linked to the consumer price index.

Lessons Learned From Reviewed Evidence

- Tobacco tax increases are effective in reducing the prevalence of tobacco use by adolescents. Efforts to increase State taxes on tobacco products have included the mobilization of community groups, other groups, and legislators. Depending on the State, taxes can be increased through either the *initiative* or the *legislative* process.
- Although tobacco tax increases will decrease the prevalence of adolescent tobacco use, other prevention activities must be utilized to sustain such decreases. Tobacco tax increases are most effective within a comprehensive, multicomponent prevention program.
- The benefits of increases in tobacco taxes, such as reduction in adolescent cigarette use, will shrink as inflation erodes the real value of the tax increase—unless the excise tax is indexed so that the nominal tax rate (expressed in cents per pack) rises in step with prices. Indexing tobacco taxes to the consumer price index or to the wholesale price of cigarettes would make permanent the public health gains of higher taxes.

PREVENTION APPROACH 2: Counteradvertising

The primary goal of counteradvertising is to change perceived norms among children and adolescents regarding tobacco use.

Rationale

Research and experience demonstrate that adolescents develop attitudes, beliefs, and behaviors regarding tobacco use from peers, family members, television, and other cultural sources. Adolescents often think that tobacco use is more widespread and universally acceptable than it actually is. Advertising links tobacco use with peer acceptance, success, and good times. Media messages that promote negative images about tobacco use, reveal the number of teens who actually use tobacco, and address the unacceptableness of tobacco use should help change these perceived norms.

Objectives of the Studies Reviewed

- To increase exposure of children and adolescents to negative messages about using tobacco or to increase positive messages about not using tobacco
- To increase adolescents' ability to identify hidden messages (e.g., "If you smoke, you're cool") in tobacco advertising
- To increase young people's awareness of tobacco industry marketing tactics
- To improve adolescents' tobacco refusal skills
- To encourage adolescents to quit smoking

Activities of the Studies Reviewed

- Radio and television campaigns
- Multilevel media campaigns that include billboards, posters, magazines, radio, and television
- A mass-media campaign linked to a school-based prevention intervention
- Airing of antitobacco media campaigns on prime-time television

Level of Evidence

The research evidence reviewed indicates that it is possible to implement counteradvertising interventions:

- There is **strong evidence** that counteradvertising is effective in changing the attitudes of adolescents about tobacco use.
- There is **medium evidence** that counteradvertising is effective in reducing adolescent tobacco use.

Lessons Learned From Reviewed Evidence

- Counteradvertising, in the form of multicomponent media-based prevention efforts, can have an effect on youth with regard to awareness of media campaigns, decreased smoking prevalence, and nonsmokers' decreased intention to start. These efforts demonstrate the ability to result in increased negative

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attitudes toward smoking, an increased understanding of the consequences of smoking, and decreased rates of friends' approval of smoking.

- Multicomponent prevention efforts are more effective than single-component prevention programs. Media campaigns have been shown to support and promote other components and vice versa. Effective media campaigns involve linkages with other intervention activities.
- To be effective, media messages should be age appropriate and designed with the target audience's developmental stage in mind. In particular, messages should not be too subtle or too sophisticated.

PREVENTION APPROACH 3: Retailer-Directed Interventions

The primary goal of tobacco retailer-directed interventions is to reduce tobacco sales to minors and tobacco purchases by minors. Within this approach, research and practice is divided into three clusters: merchant and community education about adolescent tobacco use and laws prohibiting tobacco sales to minors, enactment of laws prohibiting tobacco sales to minors, and enforcement of laws prohibiting tobacco sales to minors combined with merchant and community education about adolescent tobacco use and the laws prohibiting tobacco sales to minors.

CLUSTER 1: Merchant and Community Education About Adolescent Tobacco Use and the Laws Prohibiting Tobacco Sales to Minors

Rationale

Research demonstrates that adolescents can easily purchase tobacco products in convenience stores, grocery stores, service stations, and pharmacies. Educating merchants, clerks, and community members about adolescent tobacco use and the laws prohibiting tobacco sales to minors should reduce the likelihood of sales to minors.

Objectives of the Studies Reviewed

- To determine whether education programs aimed at merchants and the community at large reduce the sale of tobacco products to minors
- To determine whether offering positive reinforcement to clerks and merchants for not selling tobacco to minors reduces tobacco sales to minors
- To determine whether asking for proof of age reduces tobacco sales to minors

Activities of the Studies Reviewed

- Educate clerks and merchants about adolescent tobacco problems, existing laws prohibiting tobacco sales to minors, and their responsibility for complying with these laws.
- Educate the public, community groups, and mass media about adolescent tobacco problems and existing laws prohibiting tobacco sales to minors.

- Enlist community support for and involvement in educational interventions.
- Monitor and publicize the results of attempts made by adolescents to purchase tobacco.
- Provide warning signs in retail stores about laws prohibiting tobacco sales to minors.

Level of Evidence

The research and practice evidence reviewed indicates that interventions can be designed to provide merchant and community education about adolescent tobacco use and the laws prohibiting tobacco sales to minors:

There is **medium evidence** that combined merchant and community education results in a short-term decrease in over-the-counter tobacco sales to minors.

CLUSTER 2: *Enactment of Laws To Prohibit Tobacco Sales to Minors*

Rationale

Research demonstrates that adolescents can easily purchase tobacco products in convenience stores, grocery stores, service stations, and pharmacies. They can easily purchase cigarettes from vending machines. Enacting laws prohibiting over-the-counter and vending machine tobacco sales to minors should reduce the likelihood of tobacco sales to them.

Objectives of the Studies Reviewed

- To determine whether enacting laws to restrict tobacco sales to minors and increasing penalties for merchants who violate these laws will result in a change in merchants' attitudes and behaviors
- To determine whether an ordinance restricting tobacco sales to minors has an effect on sales to them
- To determine whether an ordinance that mandates locking devices on cigarette machines will decrease machine sales of cigarettes to minors

Activities of the Studies Reviewed

- Enact local ordinances restricting the sale of tobacco to minors.
- Place cigarette vending machines in locations inaccessible to minors.
- Require locking devices on cigarette vending machines that merchants must unlock for a purchase to occur.
- Require merchant licenses for vending machines.
- Require merchant licenses for over-the-counter sales of tobacco products.

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- Require merchants to ask for proof of age when a customer appears to be underage.
- Require that merchants post warning signs about laws restricting tobacco sales to minors.
- Enact civil penalties (for example, suspension or revocation of licenses) for violating laws restricting tobacco sales to minors.

Level of Evidence

The research reviewed indicates that laws can be written and established that increase the penalties for selling tobacco to minors:

- There is **substantial evidence of the ineffectiveness** of enacting ordinances requiring locking devices on cigarette machines. These ordinances are ineffective because merchants see locking as a burden and frequently leave the devices unlocked. Law enforcement officials accord a low priority to these infractions.
- There is **medium evidence** that laws increasing penalties for tobacco sales to minors have a short-term effect on reducing over-the-counter tobacco sales to minors.

CLUSTER 3: Enforcement of Laws Prohibiting Tobacco Sales to Minors Plus Merchant and Community Education About Adolescent Tobacco Use and the Laws Prohibiting Tobacco Sales to Adolescents

Rationale

Research demonstrates that adolescents can easily purchase tobacco products in convenience stores, grocery stores, service stations, and pharmacies. They can easily purchase cigarettes from vending machines. A comprehensive effort to enact and enforce laws prohibiting tobacco sales to minors, in addition to educating merchants, clerks, and the community about these laws and about adolescent tobacco use, should reduce the likelihood of tobacco sales to minors.

Objectives of the Studies Reviewed

- To determine whether enforcement of laws prohibiting tobacco sales, combined with merchant and community education about adolescent tobacco use and the laws prohibiting sales to minors, will decrease sales of tobacco products to minors over the long term
- To determine whether an enforcement component in combination with a community education intervention has greater impact than an education program alone

Activities of the Studies Reviewed

- Seek and secure community partnership, support, and sponsorship of prevention activities.
- Establish the rate of tobacco sales to minors by monitoring purchase attempts.
- Visit merchants to educate them about the laws prohibiting sales to minors and the consequences of noncompliance.
- Have youth and law enforcement personnel work together to deliver merchant education materials (for example, tips on how to refuse sales to minors, warning signs, fact sheets).
- Monitor and publicize the results of adolescents' attempts to purchase tobacco products.
- Provide positive reinforcement (for example, financial rewards, product incentives, media recognition) to merchants who refuse to sell tobacco to adolescents.
- Hold press conferences and similar events to publicize activities.

Level of Evidence

The research and practice evidence reviewed indicates that it is possible to implement prevention programs that combine merchant and community education with law enforcement components:

There is **medium evidence** that combined merchant and community education with enforcement of the law will reduce over-the-counter tobacco sales to minors. However, because most localities have only recently enhanced their education and enforcement efforts, there is **insufficient evidence** to conclude that this effect will be sustained over a long period of time.

Lessons Learned From Reviewed Evidence

- Merchant education is a valuable component of community-based prevention strategies. Although merchant education as an independent component of prevention may not cause robust results by itself, it appears to enhance the effect of other prevention components.
- Similarly, merchant education in the context of a multicomponent community-based prevention program helps to increase promotion of community involvement. It can help merchants to understand their role in community prevention efforts and to perceive themselves as community partners. Merchant education helps other community partners to understand the roles and responsibilities of merchants in a community partnership and diminishes the likelihood of viewing cigarette merchants as adversaries.

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- There is a continuum of effect as a result of increasing the intensity of interventions; that is, the passing of a law prohibiting tobacco sales to minors without any other interventions will have the least effect. The intervention effect is optimized when there are several components, namely: (1) enacting laws prohibiting tobacco sales to minors, (2) enforcing these laws through publicized purchase attempts with police sponsorship or cooperation, (3) educating merchants and the community about adolescent tobacco use and the laws prohibiting tobacco sales to minors, (4) seeking comprehensive community support of these prevention efforts, and (5) education of and cooperation with judges to impose consequences on violators of the tobacco access laws.
- Adolescents can take an active role in education and prevention efforts with adults. They can be effective as partners in educating members of the legislature, local judges, and local organizations and agencies. In particular, adolescents can work as partners with law enforcement during merchant education efforts.
- Decreased sales of tobacco to youth within a given community are not necessarily indicative of decreased availability or accessibility to youth, because adolescents may be able to obtain tobacco in nearby communities. The real-world effects of these efforts should be considered on the target population as well as on nearby communities.

PREVENTION APPROACH 4: Multicomponent School-Linked Community Approaches

The primary goal of this prevention approach is to discourage adolescent tobacco use by mobilizing community systems through school-based programs. Within this prevention approach, the research and practice evidence is divided into three clusters each with its own emphasis: parent involvement, student antitobacco activism, and media interventions.

CLUSTER 1: *Parent Involvement*

Rationale

Research demonstrates that multicomponent programs are more effective than single-component interventions for preventing tobacco use among adolescents. Adding parental involvement to a school-based prevention program should therefore increase the effectiveness of the school-based program.

Objectives of the Studies Reviewed

- To expose parents to antitobacco messages through multiple channels
- To increase parents' knowledge about tobacco problems and antitobacco attitudes and beliefs

- To increase parents' awareness of, receptivity to, and participation in smoking prevention efforts
- To encourage parents to discuss tobacco-related issues with their children
- To help families develop rules regarding tobacco use in the home
- To determine whether adding a parental component increases the effectiveness of school-based antitobacco programs
- To enlist parents in influencing the attitudes of educators and school administrators about adolescents' tobacco problems
- To help parents strengthen their children's refusal skills and to change family norms to nonuse of tobacco

Activities of the Studies Reviewed

- Parent surveys
- Take-home quizzes for parents and students
- Letters to parents
- Smoking cessation services and self-help materials for parents
- Television segments on smoking prevention and cessation
- Pamphlets for parents containing information about teen tobacco problems
- Educational materials for parents with tips on how to encourage their kids not to smoke
- Parent training
- Community organizing to develop school policies discouraging tobacco use and to institute drug prevention curricula
- Community organizing to promote community change regarding use of alcohol, tobacco, and illicit drugs by adolescents
- Media campaigns to support other program components

Level of Evidence

The research and practice evidence reviewed indicates that it is possible to implement multicomponent prevention programs that combine parental involvement components with other prevention efforts, such as school-based programs:

- There is **medium evidence** that multicomponent, school-linked programs with a parental component promote (1) improved parental knowledge about adolescent tobacco use, (2) the development of negative attitudes by parents toward tobacco use, and (3) the mobilization of parents to speak with their children about not using tobacco.
- There is **medium evidence** that these programs change students' perceptions regarding tobacco use.

CLUSTER 2: *Student Antitobacco Activism*

Rationale

Research demonstrates that multicomponent programs are more effective than single-component interventions in preventing tobacco use among adolescents. Adding student antitobacco activism as a component to a school-based prevention program should, therefore, increase the effectiveness of the school-based program. *Student antitobacco activism* is defined as participation in planned and structured activities designed to raise awareness, provide education, or prompt social changes relating to tobacco use among youth.

Objectives of the Studies Reviewed

- To increase students' knowledge of problems associated with tobacco use
- To promote antitobacco education and attitudes among peers
- To teach students how to encourage their parents and others to quit smoking
- To create an antitobacco environment
- To counteract the promotional efforts of the tobacco industry
- To encourage students to play a prominent role in developing messages and designing activities that will have a positive effect on their peers
- To determine whether activism components attract and affect students at high risk for tobacco use

Activities of the Studies Reviewed

- Writing letters to:
 - Members of a favorite sports team, asking them not to use or endorse tobacco products
 - A restaurant manager or owner, advocating smoke-free restaurants
 - Film producers and magazine editors protesting tobacco advertising
- Holding poster contests
- Creating antitobacco art projects
- Making floats and participating in community parades and festivals
- Writing and singing antitobacco songs
- Revising school policies regarding tobacco use
- Planning and attending a culturally specific youth health day
- Designing and painting an antitobacco mural at a junior high school
- Participating in the production of antitobacco animated videos, in debates regarding tobacco issues, and in the development of a smoking education curriculum

Level of Evidence

The research and practice evidence reviewed indicates that it is possible to implement prevention programs that involve student activism:

- There is **medium evidence** that adolescents can be mobilized to participate in antitobacco activism within schools and the community.
- There is **medium evidence** that student activism is effective in improving adolescents' knowledge about tobacco and in promoting negative attitudes regarding tobacco use.
- There is **suggestive but insufficient evidence** that student activism is effective in preventing adolescent tobacco use because few studies have assessed this outcome.

CLUSTER 3: *Media Interventions*

Rationale

Research demonstrates that multicomponent programs are more effective than single-component interventions in preventing tobacco use among adolescents. Adding media-based interventions to a school-based prevention program should therefore increase the effectiveness of the school-based program.

Objectives of the Studies Reviewed

- To disseminate information about the hazards of tobacco use and the use of marketing techniques by the tobacco industry
- To counteract the influence of media campaigns by the tobacco industry
- To assess the effects of a print media campaign directed at adolescents and their parents
- To increase parents' negative attitudes toward adolescent tobacco use
- To provide adolescents with knowledge and skills to resist peer, family, and media influences to use tobacco
- To determine whether adding mass-media interventions to a school-based prevention program enhances the impact of the school program

Activities of the Studies Reviewed

- Mass-media events such as press conferences, interviews, talk shows, and articles
- Daily 5-minute television segments featuring smoking prevention that are coordinated with school curricula

- Curricula and other written information on the hazards of tobacco use for students, teachers, and parents
- Mass-media antitobacco advertisements and public service announcements

Level of Evidence

The research evidence reviewed indicates that it is possible to develop adolescent tobacco use prevention programs utilizing media components in combination with other prevention efforts (such as school-based programs):

- There is **medium evidence** that exposure to media-based antitobacco interventions, in concert with school-based tobacco education, can change adolescent students' knowledge, attitudes, and beliefs about tobacco use and industry marketing practices.
- There is **medium evidence** that multicomponent prevention programs that include media-based interventions are effective in preventing adolescent tobacco use.

Lessons Learned From Reviewed Evidence

- Programs designed to enhance the effectiveness of school-based curricula result in increased family and student attention to antitobacco messages. However, there is limited evidence that these programs reduce tobacco use among youth.
- The effects of a fully implemented school- and community-based intervention (including parental involvement) to reduce adolescent tobacco use as part of a broader substance abuse prevention strategy may be limited by the community's view of tobacco use as a minor issue in relation to other forms of substance abuse and the likelihood that addressing adolescent tobacco use will not be considered a priority.
- The effectiveness of multicomponent prevention programs may be related to the multiplicative effect, that is, the net effect of a program may be greater than the sum of the individual effects of the program components. In other words, the ways in which program components interact with each other and their effects on each other are largely unknown. As a result, it may not be feasible to assess the independent contributions of each component.
- Students who voluntarily participate in school-based antitobacco activism projects may not be at high risk for using tobacco. The program, therefore, may be focused disproportionately on those who are already at low risk.

PREVENTION APPROACH 5: Tobacco-Free Environment Policies

The primary goal of tobacco-free environmental policies is to create environments that do not expose youth to the use and possession of tobacco.

Rationale

Research demonstrates that tobacco use and exposure to secondhand tobacco smoke is a threat to health. Policies restricting the use of tobacco in schools and other environments should reduce adolescents' exposure to secondhand tobacco smoke and limit places where they can use tobacco and thus reduce the health risks associated with tobacco use and secondhand smoke.

Objectives of the Studies Reviewed

- To develop and implement policies restricting or prohibiting tobacco use by adolescents and adults in recreational, school, and work settings
- To evaluate the effectiveness of policies restricting tobacco use on rates of adolescent smoking
- To provide information and services that will assist individuals to develop and comply with policies restricting tobacco use

Activities of the Studies Reviewed

- Review existing laws and compliance with laws restricting tobacco use in certain settings
- Review the effects of antismoking school policies on adolescent smoking
- Provide technical assistance and guidance on developing and implementing tobacco-free policies and environments
- Educate and inform concerned parties about laws restricting tobacco use in certain settings

Level of Evidence

The research and practice evidence reviewed indicates that it is possible to implement policies restricting tobacco use in schools and child day-care centers:

There is **medium evidence** that it is possible to influence organizations to develop policies restricting the use, possession, and exposure to tobacco among adolescents and adults. Because changes in policies regarding smoking are relatively recent, it is difficult to determine the ultimate effects of these changes on adolescent tobacco use.

Lessons Learned From Reviewed Evidence

- The establishment of smoking regulations can be accomplished through a variety of mechanisms, including State and local laws, and policies at businesses, schools, and child-care centers. Comprehensive policies can decrease prevalence rates, especially when their emphasis is on prevention and cessation.
- Harsh penalties for the possession of tobacco products by minors, such as suspension from school, may be ineffective interventions for enhancing the enforcement of antismoking regulations or for preventing or decreasing adolescent tobacco use. Instead, programs that provide prevention or cessation services, such as tobacco education courses, tobacco cessation programs, or diversion alternatives, may be most effective.

PREVENTION APPROACH 6: Restriction of Advertising and Promotion

The primary goal of this prevention approach is to decrease child and adolescent exposure to tobacco promotion and pro-tobacco influences.

Rationale

Research demonstrates that tobacco company sales promotions are reaching adolescents and that this exposure may put them at greater risk for smoking (DiFranza et al. 1991; Fischer et al. 1991). Therefore, the reduction of youth exposure to particular types of marketing or to the quantity of marketing should reduce adolescent smoking.

Objectives of the Studies Reviewed

- To eliminate tobacco industry sponsorship of sporting and cultural events
- To provide alternative, nontobacco industry sponsorship of these events

Activities of the Studies Reviewed

- Provide media advocacy and the threat of adverse publicity through protesting events sponsored by the tobacco industry
- Assist event promoters by providing alternative, nontobacco funding
- Develop policies that ban tobacco industry sponsorship of sporting and cultural events
- Promote tobacco-free events
- Develop tobacco-free messages and embed them in sports education
- Advertise tobacco-free events
- Include tobacco-free messages in the event's promotional materials

Level of Evidence

The practice evidence reviewed indicates that it is possible to implement efforts designed to eliminate tobacco sponsorship of events, to block tobacco product promotion, and to provide non-tobacco industry sponsorship of events:

- There is **strong evidence** that it is possible to establish policies that ban tobacco industry sponsorship of social and cultural events and influence product promotion practices.
- There is **medium evidence** that policies banning tobacco industry promotion of activities such as music festivals and sporting events will reduce adolescent use of tobacco.

Lessons Learned From Reviewed Evidence

- The need for alternative funding is an essential component for interventions that are designed to prohibit existing and ongoing tobacco industry sponsorship of a currently active event. In particular, practitioners and community groups can develop lists of potential alternative sponsors for event promoters and be willing to actively help promoters seek alternative sponsorship. For example, local businesses that are not currently involved in sponsoring the event can be approached.
- Through the establishment of working relationships with local potential sponsors, businesses can view sponsorship of events as part of their civic responsibilities and as part of a community partnership process. In addition, existing nontobacco event sponsors may be willing to increase their level of sponsorship if there is no tobacco industry sponsorship. They may have recommendations for other potential sponsors, perhaps some of their industrial partners.

Recommendations for Practice

The following are recommendations, suggestions, observations, and interpretations made by the PEPS Expert Panel members regarding the prevention approaches evaluated in the preceding section of this guide. There are recommendations corresponding to each of the six prevention approaches.

The basis of the recommendations in this section includes the research and practice evidence listed in the "Research and Practice Evidence Analyzed" at the end of this guide and the Expert Panel members' research and practice experiences and opinions.

Recommendations for Prevention Approach 1: Economic Interventions

The Expert Panel recommendations regarding economic interventions focus on allocation of revenues, policy and media efforts.

- When tax increases are implemented, an effort should be made to study the potential effect on youth consumption, including the establishment of baseline evaluations to accurately assess changes after implementation.
- Laws creating tobacco tax increases can include an allocation of resulting revenues for community health education, adult and adolescent tobacco use prevention and cessation programs, and tobacco-related prevention and disease research.
- Experience suggests that there will be strong lobbying from the tobacco industry to decrease the amount of proposed tobacco taxes. Prevention groups, therefore, have often worked to help set high initial taxation thresholds. Some have lobbied and others may lobby for the highest tax possible.
- Experience suggests that there will be aggressive, targeted advertising by the tobacco industry against tobacco tax increases. As a result, an aggressive mass-media campaign is an integral component of prevention efforts. Such campaigns include sustained and intense media interaction, and providing the media with information, the names of community partners, and activities that are media-worthy. Results from adolescent purchase attempts locally and regionally can be provided for media coverage.

Recommendations for Prevention Approach 2: Counteradvertising

The Expert Panel recommendations regarding counteradvertising focus on youth participation, media messages, and sustained efforts.

- Adolescents can provide to adults a distinctive understanding of the beliefs, attitudes, perspectives, and opinions of young people. They can be motivated to participate in efforts to prevent adolescent tobacco use. Therefore, youth can have a valuable role in the planning and development of counteradvertising prevention programs.
- Providing too much information at one time can weaken a mass media campaign. Media campaigns should have simple and focused messages that can be understood by the target audience.
- Adolescents can play an important role in the formative evaluation of potential prevention approaches. Media approaches, especially counteradvertising, should be evaluated by adolescents prior to implementation, such as through focus groups and surveys. Indeed, one study noted that the goals and aims of one media-based prevention effort was not understood by the youths to whom it was directed.
- When possible, mass media campaigns should be multimedia and should include television, radio, billboards, and print media. Radio, however, may be the most cost-effective approach.

- A statewide multimedia antismoking campaign has a role in decreasing cigarette use, as demonstrated by the studies by Glantz (1993) and Popham et al. (1994), which demonstrate the effect of the 1990-1991 Tobacco Education Media Campaign conducted by the California Department of Health Services. Proposition 99 included a 25-cent cigarette tax increase and a media campaign involving: paid advertising to promote media messages; a full range of communication approaches, including public and community relations; and mass-media spots targeting the general public and specific cultural groups, such as African Americans, Hispanics, Vietnamese, Koreans, Japanese, and Chinese. The enactment of Proposition 99 resulted in a tripling of the rate at which cigarette consumption had been falling. Results showed an increase in the awareness of the media campaign among students, a decrease in the percentage of students who were smokers, an increase in the proportion of smokers with an intention to quit, and an increase in health-enhancing attitudes. Campaign-exposed students demonstrated stronger health-enhancing attitudes than their campaign-unexposed counterparts. Although this media campaign was eventually suspended, such studies demonstrate the need to promote ongoing support for similar campaigns.
- Because tobacco use norms are changing rapidly and new generations of adolescents will view tobacco use differently, media approaches should constantly be modified and tailored to encourage antitobacco attitudes among new generations of youth.

Recommendations for Prevention Approach 3: Retailer-Directed Interventions

The Expert Panel recommendations regarding retailer-directed interventions focus on community readiness for change and improving the effectiveness of prevention efforts.

- It is important to document the magnitude of the problem of youth access to tobacco in one's community. Providing quantitative profiles and descriptions of the local community increases awareness of adolescent tobacco use problems. Also, such documentation can stimulate community interest in taking action.
- Communities differ with regard to readiness for prevention efforts, especially those that involve community organizing. Some communities seem primed for establishing comprehensive prevention efforts, whereas others do not recognize adolescent tobacco use as a major concern. Thus, analysis of community readiness must precede attempts to engage reluctant communities in prevention efforts.
- Community readiness planners should also assess the readiness of specific agencies that apply as lead agencies for prevention projects. In some communities, lead agencies, which may include hospitals, schools, or substance abuse agencies, may be reluctant to engage in controversial activities, even when

Requests for Proposal spell out activities such as compliance checks. Community readiness can be increased by obtaining the support of community leaders for such prevention and educational efforts.

- Adolescent access to tobacco is not limited to direct purchase at stores, but includes purchase, receipt, or theft from adults and peers, theft from stores, and receipt of free samples in cigarette giveaway events. Therefore, researchers and practitioners should consider venues of access other than stores.
- Research and experience suggest that prevention issues and messages should be localized and individualized for each community. As a result, local and small media should be important components of all prevention efforts. These can include local print, radio, and television media, when available, as well as newsletters for agencies and organizations.
- Research and experience demonstrate that adolescents have almost unrestricted access to tobacco vending machines. In addition, laws prohibiting tobacco sales to minors have almost no effect on adolescent access to tobacco vending machines. Similarly, research and experience demonstrate that locking devices on tobacco vending machines are ineffective in practice because compliance with the operating procedure is low except when supported by ordinances enacted by communities.
- Prevention efforts should be part of a sustained process, not random and isolated events. In addition, it is important to show that the prevention process is effective. Therefore, interventions, including adolescent purchase attempts, should be regularly scheduled and their results heavily publicized. Interventions should be continually assessed and improved. The community partnership should be continually strengthened with new members, and community education should be ongoing.
- One aspect of an effective approach for enforcing laws prohibiting tobacco sales to minors involves the enactment and enforcement of licensure of retail tobacco outlets. In this way, only stores with tobacco licenses can sell tobacco. Furthermore, violation of the tobacco access laws can result in suspension or revocation of the tobacco license. This creates an incentive for the merchant to comply with the law. Some States use their alcohol licensing laws as the model for their tobacco licensing laws. However, the wording of alcohol licensing laws should be carefully examined. The laws may contain language that hamper enforcement (e.g., "knowingly sell") or ban the use of minors for compliance checks.
- Even when there is a comprehensive prevention program, violators of the tobacco access laws are often not disciplined, fined, or sentenced. Judges report that they are reluctant to impose the legal consequences because they view the crimes as minor and do not want the merchants to have criminal

records. This is especially true in small cities. Therefore, because the judicial system is an important link in a comprehensive prevention program, judges should be approached and included as members of community partnerships. This can be particularly important when law enforcement partners are active. The police may become reluctant to pursue further efforts if they see that judges are throwing the cases out of court.

- Since many judges are reluctant to impose consequences on merchants for tobacco sales to minors when the law defines the violation as a criminal offense, some States have changed tobacco access laws from criminal to civil laws. When a violation of tobacco access laws becomes a civil rather than a criminal offense, judges may be more amenable to impose penalties.
- Prevention programs should include positive reinforcement of clerks and merchants for not selling tobacco to adolescents, for asking proof of age, and for obeying other aspects of the law. Such incentives may include local media publicity and rewards, such as free dinners or products donated by local restaurants and merchants.

Recommendations for Prevention Approach 4: Multicomponent School-Linked Community Approaches

The Expert Panel recommendations regarding multicomponent school-linked community approaches focus on improving the impact of mass media interventions.

- The impact of mass-media interventions on adolescents is more likely when the interventions:
 - Are linked with other program channels, such as schools, parent groups, and newsletters
 - Share common objectives with school programs
 - Are provided in sufficient duration
 - Use multiple channels
 - Are presented at times and places when adolescents report their highest use of media
 - Use a variety of message styles
 - Appeal to age- and gender-specific motives that have been determined through formative research
 - Use messages portraying perceived social support with age- and gender-relevant models providing appropriate behavioral skills, alternatives, and reinforcement
 - Include media-based antitobacco information that can reach adolescent students within schools and communities. Programs that use media approaches should be prepared to measure the extent to which the target audience is exposed to the message.

- Visual rather than written intervention materials may be more appropriate and effective for groups with low literacy rates and for such communities as adult Asian and Pacific Islander immigrants, refugees, and certain high-risk youths.
- Antitobacco activism may have an important role in promoting antitobacco attitudes and behaviors among youth, even in the face of protobacco messages in the environment. Furthermore, antitobacco activism may help to support other elements of a multicomponent prevention program.
- Many prevention practitioners support peer activism as an integral component of a comprehensive prevention strategy. Several States have a Teen Institute for substance abuse prevention, and there are numerous community activities that engage youth as antitobacco activists.
- The ability of parents to influence the substance use choices of their children is strongly suggested by prevention participation and, to a lesser degree, by research. However, there are barriers to the successful implementation of these influences. These barriers are varied and include current or past parental substance use and addiction, tobacco industry messages, and the selection of user-friendly mediums for the intended messages.

Recommendations for Prevention Approach 5: Tobacco-Free Environment Policies

The Expert Panel recommendations regarding tobacco-free environmental policies focus on the target of policies and community support.

- Policies restricting smoking that are limited to one but not all groups may be ineffective and may send mixed messages. For instance, a school-based policy that enforces the legal ban on tobacco use among students but allows the legal use by teachers and staff may send the message that tobacco use among adults is acceptable. Therefore, smoking policies should be designed to be consistent across the board. For instance, in the case of schools, the same policy should be enforced for students, teachers, staff, and visitors and should be enforced at all school-related functions, not merely on school grounds.
- When nonsmoking policies are established and mandated without local support, problems may arise with regard to compliance and enforcement. Therefore, efforts to establish nonsmoking policies should utilize a grassroots approach involving the community and youth in the planning, development, and implementation of policies. Nearly all States are funded through either the National Cancer Institute's ASSIST (American Stop Smoking Intervention Study) program or the Center for Disease Control and Prevention's IMPACT (Initiatives to Mobilize for the Prevention and Control of Tobacco use) program to establish and implement such grassroots approaches.

Recommendations for Prevention Approach 6: Restriction of Advertising and Promotion

The Expert Panel recommendations regarding advertising and promotion restriction interventions focus on community partnerships and integrating messages.

- It is recommended that practitioners and even community groups not attempt to conduct these types of interventions in isolation. Rather, they should work in close partnership with community leaders, grassroots organizations, and members of the community. An aggressive attempt should be made to seek and receive acceptance of the interventions from community members and from policymakers. Perhaps the most serious mistake is entering a community and appearing to dictate how things are done in that community. Cooperation on all levels is necessary.
- An important lesson learned from multicomponent prevention programs is that the individual components of such a program should be complementary elements that share the same overall goals and philosophy. When tobacco-free or antitobacco messages are incorporated into event activities, they should be integrated with existing activities, messages, and promotions. They should not be merely add-on messages but should support other activities.
- The generalizability of these promising interventions to other social settings depend on a number of variables, such as the readiness of the community for such activities, the geographic area, and the social and cultural support for prevention of adolescent tobacco use.

Conclusions

This practitioner's guide is intended to be brief and simple. Much of the detail concerning the analysis of these prevention approaches, as well as a history of tobacco use in the United States, the epidemiology of tobacco use among youth, and recommendations for implementation of the approaches described here, can be found in the parent document, *Reducing Tobacco Use Among Youth: Community-Based Approaches*. The reader is referred to the parent guideline for a full treatment of these issues.

Both documents bring you a first-of-its-kind set of guidelines for practitioners based on the PEPS systematic analysis of the effectiveness of interventions. These guidelines are intended to be clear, realistic, and relatively easy to use. It is hoped that they will help develop markedly more effective tobacco-reduction programs for youth.

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Cluster 2: Research Evidence

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The *Pajaro Valley Prevention and Student Assistance* program of the Pajaro Valley Unified School District: Watsonville, California.

The *Project SCAN (Stop Children's Addiction To Nicotine)*: Erie County, New York.

The *Stop Tobacco Access for Minors Project* of the North Bay Health Resources Center: Sonoma County, California.

The *Stop Teenage Addiction to Tobacco* program of Stanford University School of Medicine: San Jose, California.

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Cluster 1: Practice Evidence

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Cluster 2: Research Evidence

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Cluster 2: Practice Evidence

The *Health Is Wealth* project of the Asian Health Services: Oakland, California.

Cluster 3: Research Evidence

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Tobacco Free-Environment Policies

Research Evidence

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Practice Evidence

The *Colorado Tobacco-Free Schools and Communities Project* of the Colorado School Health Council: Denver, Colorado.

Restriction of Advertising and Promotion

Practice Evidence

The *Coalition Against Uptown Cigarettes*: Philadelphia, Pennsylvania.

The *Coalition for a Tobacco-Free Monterey County*: Monterey, California.

The *Ski Tobacco-Free* project of the Kirkwood Ski Education Foundation: Kirkwood Ski Resort, Alpine County, California.

The *Tobacco-Free Soccer League Initiative Project* of the Health Education Council: Sacramento, California.

Appendix A: Criteria for Establishing Levels of Evidence of Effectiveness

The following descriptions are intentionally brief. For a more rigorous definition of the criteria, refer to the parent document *Reducing Tobacco Use Among Youth: Community-Based Approaches*.

Strong Level of Evidence

Consistent results of strong or medium effect from:

- At least **three** studies with experimental or quasi-experimental designs *and*
 - The use of at least **two** different methodologies
- OR
- **Two** studies with experimental or quasi-experimental designs *and*
 - At least **three** case studies

Medium Level of Evidence

Consistent positive results from:

- At least **two** studies with experimental or quasi-experimental designs *and*
 - The use of at least **two** different methodologies
- OR
- **One** study with experimental or quasi-experimental design *and*
 - At least **three** case studies

Suggestive but Insufficient Evidence

Research or practice evidence that:

- Is based on a plausible rationale or on previous research *and*
- Is being demonstrated in well-designed studies or programs currently in process
- Minimally demonstrates that the intervention being tested is linked to a positive effect.

Substantial Evidence of Ineffectiveness

Research and practice evidence demonstrating that a prevention approach is not effective. The criterion for inclusion in this category is a statistically significant negative effect in a majority of competently done studies, including at least two quantitative studies with sample sizes sufficient to test for the significance of the effect.

Appendix B: Abbreviations and Glossary

Abbreviations

ADAMHA	Alcohol, Drug Abuse, and Mental Health Administration
AIDS	Acquired Immunodeficiency Syndrome
ASSIST	American Stop Smoking Intervention Study
CDC	Centers for Disease Control and Prevention
DHHS	U.S. Department of Health and Human Services
EPA	Environmental Protection Agency
FCC	Federal Communications Commission
FDA	Food and Drug Administration
FTC	Federal Trade Commission
GAO	U.S. General Accounting Office
IMPACT	Initiatives to Mobilize for the Prevention and Control of Tobacco Use
MTF	Monitoring the Future
NHSDA	National Household Survey on Drug Abuse
OTA	Office of Technology Assessment

PEPS	Prevention Enhancement Protocols System
SAMHSA	Substance Abuse and Mental Health Services Administration
YRBSS	Youth Risk Behavior Surveillance System

Glossary

Assignment—the process by which researchers place study subjects in an intervention, control, or comparison group. Experimental design studies randomly assign study subjects to both intervention and control conditions. Quasi-experimental studies nonrandomly assign study subjects to intervention and comparison conditions. Random assignment increases the likelihood that the intervention and control groups are equal or comparable and have similar characteristics. *See* comparison group and control group.

Attrition—an unplanned reduction in the size of the study sample due to participants dropping out of the evaluation, such as due to relocation.

Behavioral Factors—certain patterns of conduct increase the likelihood of youth using tobacco. Most prominent of these are behaviors that lead to the perception of tobacco use as functional or appropriate. *See* environmental factors, personal factors, and sociodemographic factors.

Bias—the extent to which a measurement, sampling, or analytic method systematically underestimates or overestimates the true value of an attribute. In general, biases are sources of systematic errors that arise from faulty designs, poor data collection procedures, or inadequate analyses. These errors diminish the likelihood that observed outcomes are attributable to the intervention.

Cluster—subsets of prevention approaches. *See* prevention approach.

Community—a group of individuals who share cultural and social experiences within a common geographic or political jurisdiction.

Community-Based Approach—a prevention approach that focuses on the problems or needs of an entire community, including large cities, small towns, schools, worksites, and public places. *See* individual-centered approach.

Community Readiness—the degree of support for or resistance to identifying substance use and abuse as significant social problems in the community. Stages of community readiness for prevention provide an appropriate framework for understanding prevention readiness at the community or State level. *See* community tolerance, confirmation/expansion, denial, initiation, institutionalization, preparation, preplanning, professionalization, and vague awareness.

Community Tolerance—is present when community norms actively encourage problematic behavior, which is viewed as socially acceptable. *See* community readiness.

Comparison Group—in quasi-experimental evaluation design, a group of evaluation participants that is not exposed to the intervention. This term usually implies that participants are *not* randomly assigned, but have characteristics similar to the intervention group. *See* quasi-experimental design.

Conceptual Framework—in this guideline, the philosophical basis for a prevention approach. Specifically, the assumed reasons or hypotheses that explain why the interventions in a specific prevention approach should work.

Confirmation/Expansion—the stage in which existing prevention programs are viewed as effective and authorities support expansion or improvement of the efforts. Data are routinely collected at this stage, and there is a clear understanding of the local problem and the risk factors for the problem. New programs are being planned to reach other community members at this stage. *See* community readiness.

Construct—an attribute, usually unobservable, such as educational attainment or socioeconomic status that is represented by an observable measure.

Control Group—in experimental evaluation design, a group of participants that is essentially similar to the intervention group but is not exposed to the intervention. Participants are designated to be part of either a control or intervention group through random assignment. *See* experimental design.

Conventional Primary Prevention—substance abuse prevention approaches that focus on deterring initial use. *See* conventional secondary prevention.

Conventional Secondary Prevention—psychology-based substance abuse prevention approaches that encourage people to stop. *See* conventional primary prevention.

Correlational Analysis—a form of relational analysis that assesses the strength and direction of association between variables.

Cross-Sectional Design—a research design that involves the collection of data on a sample of the population at a single point in time. When exposure and health status data are collected, measures of associations between them are easily computed. However, because health status and exposure are measured simultaneously, inferences cannot be made that the exposure causes the health status.

Data Analysis—the process of examining systematically collected information.

Denial—the stage in which the behavior is not usually approved of according to community norms. At this stage, people are aware that the behavior is a problem but believe that nothing needs to or can be done about the behavior at a local level. *See* community readiness.

Design—often referred to as research or study design, is an outline or plan of the procedures to be followed in scientific experimentation in order to reach valid conclusions. *See* experimental design, nonexperimental design, quasi-experimental design.

Environmental Factors—those that are external or are perceived to be external to an individual but that may nonetheless affect his or her behavior. A number of these factors are related to the individual's family of origin, while others have to do with social norms and expectations. *See* behavioral factors, personal factors, and sociodemographic factors.

Experimental Design—a research design that includes random selection of study subjects, an intervention and a control group, random assignment to the groups, and measurements of both groups. Measurements are typically conducted prior to and always after the intervention. The results obtained from these studies typically yield the most interpretable, definitive, and defensible evidence of effectiveness.

External Validity—the extent to which outcomes and findings apply (or can be generalized) to persons, objects, settings, or times other than those that were the subject of the study. *See* validity.

Focus Group—a qualitative research method consisting of a structured discussion among a small group of people with shared characteristics. Focus groups are designed to identify perceptions and opinions about a specific issue. They can be used to elicit feedback from target group subjects about prevention strategies.

Fugitive Literature—articles or materials of a scientific or academic nature that are typically unpublished, informally published, or not readily available to the scientific community, such as internal reports and unpublished manuscripts. In this guideline, some practice cases are considered fugitive literature.

Incidence—the number of new cases of a disease or occurrences of an event in a particular period of time, usually expressed as a rate with the number of cases as the numerator and the population at risk as the denominator. Incidence rates are often presented in standard terms, such as the number of new cases per 100,000 population.

Individual-Centered Approach—a prevention approach that focuses on the problems and needs of the individual. *See* community-based approach.

Initiation—the stage in which a prevention program is under way but is still “on trial.” Community members often have great enthusiasm for the effort at this stage because obstacles have not yet been encountered. *See* community readiness.

Institutionalization—occurs when several programs are supported by local or State governments with established (but not permanent) funding. Although the program is accepted as a routine and valuable practice at this stage, there is little perceived need for change or expansion of the effort. *See* community readiness.

Instrument—a device that assists evaluators in collecting data in an organized fashion, such as a standardized survey or interview protocol.

Intended Measurable Outcomes—in this guideline, the overall expected consequences and results of the interventions within each prevention approach.

Intermediate Outcome—an intervention outcome, such as changes in knowledge, attitudes, or beliefs that occurs prior to and is assumed to be necessary for changes in an ultimate or long-term outcome, such as prevention of or decreases in substance use and substance-related problems.

Internal Validity—the ability to make inferences about whether the relationship between variables is causal in nature and, if it is, the direction of causality.

Intervention—a manipulation applied to a group in order to change behavior. In substance abuse prevention, interventions at the individual or environmental level may be used to prevent or lower the rate of substance abuse or substance abuse-related problems.

Lessons Learned—in this guideline, conclusions that can be reached about a specific prevention approach which are based on the research and practice evidence reviewed to evaluate the prevention approach.

Maturation Effects—changes in outcomes that are attributable to participants' growing older, wiser, stronger, more experienced, and the like, solely through the passage of time.

Mean—the arithmetic average of a set of numeric values.

Methodology—a procedure for collecting data. *See* instrument.

Multicomponent Programs—a prevention approach that simultaneously uses multiple interventions that target one or more substance abuse problems. Programs that involve coordinated multiple interventions are likely to be more effective in achieving the desired goals than single-component programs and programs that involve multiple but uncoordinated interventions. *See* single-component programs.

Multivariate—an experimental design or correlational analysis consisting of many dependent variables. *See* variable.

Nonexperimental Design—a type of research design that does not include random assignment or a control group. With such research designs, several factors prevent the attribution of an observed effect to the intervention.

Outcome Evaluation—analyses which focus research questions on assessing the effects of interventions on intended outcomes. *See* process evaluation.

Personal Factors—the cognitive processes, values, personality constructs, and sense of psychological well-being inherent to the individual and through which societal and environmental influences are filtered. *See* behavioral factors, environmental factors, and sociodemographic factors.

Practice Evidence—in this guideline, information gained from prevention practice cases, generally compiled in the form of case studies, which often include process evaluation information on program implementation and procedures. *See* research evidence.

Pre-Post Tests—in research design, the collection of measurements before and after an intervention to assess its effects.

Preparation—the stage in which plans are being made to prevent the problem, leadership is active, funding is being solicited, and program pilot testing may be occurring. *See* community readiness.

Preplanning—the stage in which there is a clear recognition that a problem with the behavior exists locally and that something should be done about it. At this stage, general information on the problem is available and local leaders needed to advance change are identifiable, but no real planning has occurred. *See* community readiness.

Prevalence—the number of all new and old cases of a disease or occurrences of an event during a particular period of time, usually expressed as a rate with the number of cases or events as the numerator and the population at risk as the denominator. Prevalence rates are often presented in standard terms, such as the number of cases per 100,000 population.

Prevention Approach—in this guideline, a group of substance abuse prevention activities that broadly share common methods and strategies, assumptions (theories or hypotheses), goals, and/or outcomes. *See* cluster.

Probability Sampling—a method for drawing a sample from a population such that all possible samples have a known and specified probability of being drawn.

Process Evaluation—an assessment designed to document and explain the dynamics of a new or continuing prevention program. Broadly, a process evaluation describes what happened as a program was started, implemented, and completed. A process evaluation is by definition descriptive and ongoing. It may be used to the degree to which prevention program procedures were conducted according to a written program plan. *See* outcome evaluation.

Professionalization—the stage in which detailed information has been gathered about the prevalence, risk factors, and etiology of the local problem. At this point, various programs designed to reach general and specific target audiences are under way. Highly trained staff run the program and community support and involvement are strong. Also at this stage, effective evaluation is conducted to assess and modify programs. *See* community readiness.

Program Evaluation—The application of scientific research methods to assess program concepts, implementation, and effectiveness. *See* outcome evaluation, process evaluation.

Protective Factor—an influence that inhibits, reduces, or buffers the probability of drug use, abuse, or a transition to a higher level of involvement with drugs. *See* risk factor.

Qualitative Data—generally constitute contextual information in evaluation studies and usually describe participants and interventions. Often presented as text, the strength of qualitative data is its ability to illuminate evaluation findings derived from quantitative methods. *See* quantitative data.

Quantitative Data—in evaluation studies, measures that capture changes in targeted outcomes (e.g., substance use) and intervening variables (e.g., attitudes toward use). The strength of quantitative data is its use in testing hypotheses and determining the strength and direction of effects. *See* qualitative data.

Quasi-Experimental Design—a research design that includes intervention and comparison groups and measurements of both groups, but assignment to the intervention and comparison conditions is not done on a random basis. With such research designs, attribution of an observed effect to the intervention is less certain than with experimental designs.

Questionnaire—research instrument that consists of written questions, each with a limited set of possible responses.

Random Assignment—the process through which members of a pool of eligible study participants are assigned to either the intervention group or a control group on a random basis, such as through the use of a table of random numbers.

Reliability—the extent to which a measurement process produces similar results on repeated observations of the same condition or event.

Representative Sample—a segment of a larger body or population that mirrors in composition the characteristics of the larger body or population.

Research—the systematic effort to discover or confirm facts by scientific methods of observation and experimentation.

Research Evidence—in this guideline, information obtained from research studies conducted to evaluate the effectiveness of an intervention and typically published in peer-reviewed journals. The basis of this information is investigations whose designs range from experimental to quasi-experimental to nonexperimental. *See* practice evidence.

Risk Factor—an individual attribute, individual characteristic, situational condition, or environmental context that increases the likelihood of drug use or abuse or a transition in level of involvement with drugs. *See* protective factor.

Sample—a segment of a larger body or population.

Simple Random Sample—in experimental research designs, a sample derived from indiscriminate selection from a pool of eligible participants, such that each member of the population has an equal chance of being selected for the sample. *See* stratified random sample.

Single-Component Programs—a prevention approach using a single intervention or strategy to target one or more problems. *See* multicomponent programs.

Sociodemographic Factors—sociodemographic factors that affect an adolescent's risk for initiating tobacco use have an indirect but powerful influence due to the limitations of the political, social, economic, and educational systems of society. *See* behavioral factors, environmental factors, and personal factors.

Statistical Significance—refers to the strength of a particular relationship between variables. A relationship is said to be statistically significant when it occurs so frequently in the data that the relationship's existence is probably not attributable to chance.

Stratified Random Sample—in experimental research designs, a sample group derived from indiscriminate selection from different subsegments of a pool of eligible participants (e.g., men and women). *See* simple random sample.

Threats to Internal Validity—the factors other than the intervention that evaluators must consider when a program evaluation is conducted, regardless of the rigor of the evaluation design, that might account for or influence the outcome. They diminish the likelihood that an observed outcome is attributable to the intervention.

Time-Series Design—a research design that involves an intervention group evaluated at least once prior to the intervention and is retested more than once after the intervention. A time-series analysis involves the examination of fluctuations in the rates of a condition over a long period in relation to the rise and fall of a possible causative agent.

Tobacco Control—the term used to describe the range of efforts employed to regulate tobacco products.

Tobacco Use—the use of cigarettes and/or smokeless tobacco.

Vague Awareness—the stage in which there is a general feeling that the behavior is a local problem that requires attention. However, knowledge about the extent of the problem is sparse, there is little motivation to take action to prevent it, and there is a lack of leadership to address it. *See* community readiness.

Validity—the ability of an instrument to measure what it purports to measure.

Variable—a factor or characteristic of the intervention, participant, and/or the context that may influence or be related to the possibility of achieving intermediate and long-term outcomes.

NOTE: This glossary is based partially on work performed by Westover Consultants, Silver Spring, MD, and the Pacific Institute for Research and Evaluation, Bethesda, MD, under other contracts with the Center for Substance Abuse Prevention.

Appendix C: Resource Guide

This Resource Guide, as its name suggests, provides the reader with specific resources for developing programs to reduce youth tobacco use. The first part lists names and addresses of researchers and practitioners whose work was considered as evidence in evaluating the various intervention programs. Because detailed descriptions of their program planning and content are beyond the scope of this Guideline (and are not fully described in their published works), CSAP thought that those interested in implementing specific strategies may want to obtain more detailed information directly from these researchers and practitioners.

The second part of this appendix lists the various Government and Nongovernment Agencies that maintain repositories of information on youth tobacco use available to the public. While many of these agencies, such as the Bureau of Alcohol, Tobacco, and Firearms of the U.S. Department of Treasury, do not primarily focus on reducing tobacco use among youth, they often have useful data related to incidence, prevalence, consequences of use, licensing, enforcement, or other aspects that practitioners might find useful in developing their educational and program planning strategies.

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Agencies and Organizations

Government Agencies

Agency for Health Care Policy and Research

Publications Clearinghouse

1-800-358-9295

<http://www.ahcpr.gov>

Center for Substance Abuse Prevention

National Clearinghouse for Alcohol and Drug Information

(301) 468-2600

1-800-Say-No-To

<http://www.health.org>

Centers for Disease Control and Prevention

National Center for Chronic Disease Prevention and Health Promotion

Office on Smoking and Health

(770) 488-5705 (publication requests)

1-800-CDC-1311 (media campaign line)

<http://www.cdc.gov/tobacco>

Environmental Protection Agency

Indoor Air Quality Information Clearinghouse

(513) 569-7562

<http://www.epa.gov>

Federal Trade Commission

Public Reference Branch

(202) 326-2222 (publications)

(202) 326-3150 (tobacco-related questions)

Food and Drug Administration

Office of Consumer Affairs

(301) 443-3170

<http://www.fda.gov/bbs/tobacinfo/juristoc.html>

Indian Health Service

Communications Staff

(301) 443-3593

National Cancer Institute

Office of Cancer Communications

1-800-4-CANCER

<http://www.nci.nih.gov/occdocs/occ.htm>

National Center for Health Statistics

Data Dissemination Branch

(301) 436-8500

<http://www.cdc.gov/nchswww/nchshome.htm>

National Health Information Center

1-800-336-4797

(301) 565-4167

<http://nhic-nt.health.org>

National Heart, Lung, and Blood Institute

Information Center

(301) 251-1222

National Institute for Occupational Safety and Health

Technical Information Branch

1-800-35-NIOSH

(513) 533-8326

<http://www.cdc.gov/diseases/niosh.html>

**National Oral Health Information
Clearinghouse**

(301) 402-7364

nidr@aerie.com

**National Technical Information
Service**

(703) 487-4650

1-800-553-NTIS

**Occupational Safety and Health
Administration**

Department of Labor

(202) 219-8151

<http://www.osh-slc.gov>

**Office of Minority Health Resource
Center**

(800) 444-6472

**United States Department of
Agriculture**

Tobacco and Peanut Division

(202) 720-4318

**United States Department of Treasury
Bureau of Alcohol, Tobacco and
Firearms**

Distilled Spirits and Tobacco Branch

(202) 927-8210

Nongovernment Organizations

Action on Smoking and Health

(202) 659-4310

<http://ash.org/ash/>

The Advocacy Institute

(202) 659-8475

**American Association of Retired
Persons**

Health Advocacy Service

(202) 434-2300

American Cancer Society

1-800-ACS-2345

<http://www.cancer.org/tobacco.html>

**American Council on Science and
Health**

(212) 362-7044

American Heart Association

National Center

1-800-AHA-USA1

<http://www.amhrt.org>

American Lung Association

(212) 315-8700

1-800-LUNG-USA

<http://www.lungusa.org>

American Medical Association

(312) 464-5000

<http://www.ama-assn.org>

Americans for Nonsmokers' Rights

(510) 841-3032

<http://www.no-smoke.org>

**Association of State and Territorial
Health Officials**

(202) 546-5400

Coalition on Smoking OR Health

(202) 452-1184

Doctors Ought to Care

(713) 528-1487

<http://www.bcm.tmc.edu/doc>

Group Against Smokers' Pollution

(301) 459-4791

**March of Dimes Birth Defects
Foundation**

(914) 428-7100

**National Federation TARGET
Program**

(816) 464-5400

SmokeFree Educational Services, Inc.

(212) 912-0960

Stop Teenage Addiction to Tobacco

(413) 732-STAT

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